

# PORTABLE CHILLERS AIR OR WATER-COOLED



Budzar's ICE (Industrial Chilling Equipment) Portable Chillers with a Programmable Logic Controller (PLC) are built for top performance and engineered for bottom line control.

Designed to circulate a fluid medium between 20° - 70° for a wide variety of industries—rubber, tire plastic, paper, food, metal and pharmaceuticals, Budzar's ICE Chillers are innovative, reliable and easily maintained.

Budzar's ICE Chillers are constructed with a (PLC) Programmable Logic Controller. The PLC displays instrumentation information i.e.; pump discharge pressure and flow, compressor suction and discharge pressure as well as compressor pump status. The highly programmable PLC may be customized to your process and software may be updated via a programming key or transferred directly from a personal computer. The PLC also displays troubleshooting information and identifies and adjusts to marginal operating conditions. Additional features include a remote set-point and alarm, retransmission as well as self-testing, sensor failures and diagnostics.

ICE Chillers are built to take the heat in industrial duty application. Their top quality components will stand up to your process and plant environment. All components are non-proprietary. The best refrigeration components available have been selected, including a scroll compressor. Each unit is factory tested prior to shipping to ensure top quality.



## engineering PRECISION

### COMPARE THESE FEATURES

- Programmable Logic Controller provides:

#### PROGRAMMABILITY

- ◇ Software may be customized, transferred directly from a personal computer and updated via programming key

#### DISPLAYED INSTRUMENTATION INFORMATION

- ◇ Pump discharge pressure and flow
- ◇ Compressor suction pressure, temperature and superheat
- ◇ Compressor discharge pressure
- ◇ Liquid refrigerant temperature and sub-cooling
- ◇ Evaporator inlet and outlet temperature
- ◇ Process supply temperature
- ◇ Compressor pump status

#### CONTROLLER FUNCTIONS

- ◇ Selectable controlled parameter (supply or return temperature)
- ◇ Head pressure control via fan motor cycling (air cooled units)

#### HIGH TECHNOLOGY

- ◇ All alarm situations, values of the monitored parameters and the status of the controlled devices are saved for service/maintenance review
- ◇ Troubleshooting information is displayed when circumstances require assistance
- ◇ The controller identifies marginal operating conditions and adjusts chiller operation

- Non-Ferrous Construction
- Scroll Compressor
- Stainless steel/brazed plate evaporator with copper pipe
- Extra large stainless steel reservoir
- Stainless steel pump
- Externally equalized modulating thermal expansion valve
- Electronic hot gas by-pass valve provides excellent temperature control for cooling capacity ranging from 0—100%
- Aluminum tank level gauge with built in thermometer
- Pump motor solid state overload protection
- Oversized refrigerant filter/drier
- Cleanable air inlet filters
- "Lift-Off" easy to remove access panels
- Powder coated cabinet
- Single point electrical connection
- Pre-mounted condenser water regulating valve (on water cooled chillers only)
- Start-to-start auto-recycle eliminates temperature swing

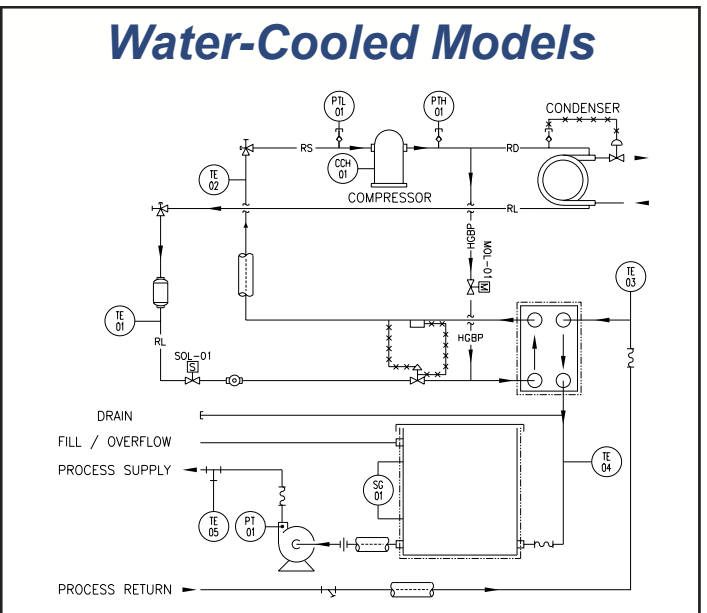
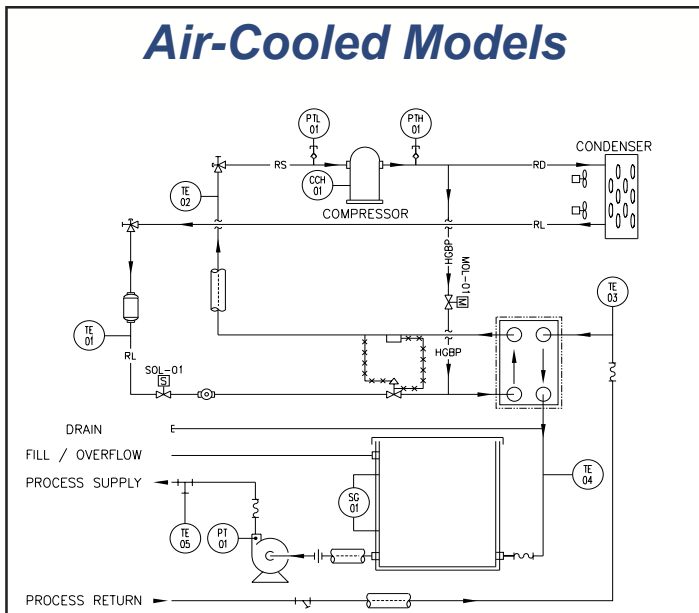


process  
**TEMPERATURE**  
CONTROL

# ICE™ SERIES PORTABLE CHILLERS

| Air-Cooled                | AC-.75   | AC-1     | AC-2    | AC-3    | AC-5    | AC-8    | AC-10   | AC-15   | AC-20   |
|---------------------------|----------|----------|---------|---------|---------|---------|---------|---------|---------|
| Capacity (nominal Tons)   | 0.75     | 1.0      | 2.0     | 3.1     | 5.2     | 7.9     | 10      | 15.4    | 20      |
| # of Compressors          | 1        | 1        | 1       | 1       | 1       | 1       | 1       | 1       | 1       |
| Compressor HP             | .75      | 1        | 2       | 3       | 5       | 8       | 10      | 15      | 20      |
| Cooling Capacity Control  | 50%-100% | 50%-100% | 0%-100% | 0%-100% | 0%-100% | 0%-100% | 0%-100% | 0%-100% | 0%-100% |
| Full Load Amp             |          |          |         |         |         |         |         |         |         |
| 115/1/60                  | 21.5A    | -        | -       | -       | -       | -       | -       | -       | -       |
| 230/3/60                  | -        | 6.1      | 12.9    | 20.2    | 26.9    | 35.8    | 44.4    | 61.1    | 73.8    |
| 460/3/60                  | -        | 3.3      | 6.8     | 10.1    | 14.1    | 18.7    | 28.1    | 31      | 35.2    |
| Condenser                 |          |          |         |         |         |         |         |         |         |
| # of Fans                 | 1        | 1        | 2       | 2       | 2       | 2       | 2       | 4       | 4       |
| HP of Each                | 1/6      | 1/6      | 1/6     | 1/6     | 1/4     | 1/2     | 1/2     | 1.0     | 1.0     |
| CFM                       | 767      | 712      | 1704    | 2420    | 4237    | 5300    | 4900    | 12000   | 12000   |
| Pump                      |          |          |         |         |         |         |         |         |         |
| HP                        | 1/3      | 1/3      | -       | 1       | 1       | 1.5     | 1.5     | 2       | 3       |
| GPM/PSI                   | 2.1/100  | 2.1/100  | 5/35    | 7/40    | 12/40   | 19/40   | 24/40   | 34/40   | 46/45   |
| Reservoir Capacity (gal.) | 6        | 6        | 31      | 31      | 31      | 65      | 65      | 65      | 65      |
| Process Connection (npt)  | .5"      | .5"      | .5"     | .75"    | .75"    | 1"      | 1"      | 1.5"    | 1.5"    |
| Dimension (in.)           |          |          |         |         |         |         |         |         |         |
| Height                    | 29       | 29       | 51      | 51      | 61      | 63      | 63      | 70.5    | 70.5    |
| Width                     | 18       | 18       | 26      | 26      | 29      | 33      | 33      | 36      | 36      |
| Length                    | 28       | 28       | 36      | 34.5    | 45.5    | 56.5    | 56.5    | 72      | 72      |
| Shipping WT (lbs)         | 220      | 220      | 450     | 450     | 600     | 900     | 1000    | 1300    | 1300    |

| Water-Cooled                 | WC-3    | WC-5    | WC-8    | WC-10   | WC-15   | WC-20   |
|------------------------------|---------|---------|---------|---------|---------|---------|
| Capacity (nominal Tons) # of | 3.1     | 5.2     | 8.2     | 10.5    | 15.4    | 21      |
| Compressors                  | 1       | 1       | 1       | 1       | 1       | 1       |
| Compressor HP                | 3       | 5       | 8       | 10      | 15      | 20      |
| Cooling Capacity Control     | 0%-100% | 0%-100% | 0%-100% | 0%-100% | 0%-100% | 0%-100% |
| Full Load Amp                |         |         |         |         |         |         |
| 230/3/60                     | 17.5    | 23.9    | 38.3    | 39.8    | 39.1    | 51.8    |
| 460/3/60                     | 9       | 12.3    | 17.4    | 20.5    | 20      | 24.2    |
| Condenser Water Flow         |         |         |         |         |         |         |
| Tower Water @ 30 PSI         | 10      | 16.5    | 24      | 33      | 48      | 64      |
| City Water @ 30 PSI          | 7       | 11      | 16      | 22      | 16      | 21      |
| Condenser Connection (npt)   | .75"    | 1"      | 1.25"   | 1.50"   | 2"      | 2"      |
| Pump                         |         |         |         |         |         |         |
| HP                           | 1       | 1       | 1.5     | 1.5     | 2       | 3       |
| GPM/PSI                      | 7/40    | 12/40   | 19/44   | 21/40   | 34/40   | 41/45   |
| Reservoir Capacity (gal.)    | 31      | 31      | 65      | 65      | 65      | 65      |
| Process Connection (npt)     | .75"    | 1"      | 1"      | 1"      | 1.5"    | 1.5"    |
| Dimension (in.)              |         |         |         |         |         |         |
| Height                       | 51      | 61      | 63      | 63      | 70.5    | 70.5    |
| Width                        | 26      | 29      | 33      | 33      | 36      | 36      |
| Length                       | 34.5    | 45.5    | 56.5    | 56.5    | 72      | 72      |
| Shipping WT (lbs)            | 400     | 600     | 1000    | 1200    | 1400    | 1600    |



38241 Willoughby Pkwy., Willoughby, Ohio 44094-7582  
 440-918-0505 · Fax 440-918-0606 / 918-0707  
 www.budzar.com · E-mail: sales@budzar.com

